Amendments to the Specification:

Please replace the paragraph beginning at page 3, line 3 with the following amended paragraph:

Prior work in the field may be classified into two categories: one that deals generally with the reduction of peak power, and another that deals specifically with "hole- blowing." Hole-blowing refers to the process of removing low-power events in a communication signal that has a time-varying envelope. This name arises in that, using this technique, a "hole' appears in the vector diagram of a modified signal.

Please replace the paragraph beginning at page 5, line 1 with the following amended paragraph:

These two restrictions can lead to errors in the magnitude and phase of the corrective pulses. Specifically, the true signal minimum may occur not at T/2, but at some slightly different time, so that error will be introduced into the magnitude of the corrective pulses. The validity of this assumption is very much dependent on the specific signal modulation and pulse-shape. For example, this may be a reasonable assumption for a Universal Mobile Telecommunication System (UMTS) uplink signal with one Dedicated Physical Data Channel (DPDCH), but is not a reasonable assumption for a UMTS uplink signal with two DPDCH active. The size of this magnitude error can be quite large. For example, in some cases the magnitude at T/2 is very near the desired minimum magnitude, but the true minimum is very close to zero. In such cases the

calculated correction magnitude is much smaller than would be desired, which in turn results in the low-magnitude event not being removed.

Please replace the paragraph beginning at page 6, line 11 with the following amended paragraph:

As compared to the foregoing methods, U. S. Patent 5,727, 026, "Method and apparatus for peak suppression using complex scaling values," addresses a distinctly different problem, namely reducing the Peak-to-Average power Ratio (PAR) of a communication signal. Large PAR is a problem for many, if not most, conventional power amplifiers (PA). A signal with a large PAR requires highly linear amplification, which in turn affects the power efficiency of the PA. Reduction is accomplished by adding a pulse to the original pulse-shaped waveform, with the pulse having an appropriate magnitude and phase such that the peak power is reduced. The pulse can be designed to have any desired spectral characteristics, so that the distortion can be kept in-band (to optimize the Adjacent Channel Power Ratio (ACPR)), or allowed to leak somewhat out-of-band (to optimize the error vector magnitude (EVM)).

Please replace the paragraph beginning at page 8, line 9 with the following amended paragraph:

The present invention may be further understood from the following description in conjunction with the appended drawings. In the drawings:

Please replace the paragraph beginning at page 10, line 12 with the following amended paragraph:

Figure 17b is a more detailed block diagram of an apparatus like that of Figure 17a;

Please replace the paragraph beginning at page 11, line 5 with the following amended paragraph:

Figure 24 is a block diagram of a [[a]] portion of a radio transmitter in which nonlinear filtering is performed first in the quadrature domain and then in the polar domain;

Please replace the paragraph beginning at page 11, line 7 with the following amended paragraph:

Figure 25 is a Power Spectral Density (PSD) showing results of the nonlinear filtering of Figure [[3]]24.

Please replace the paragraph beginning at page 11, line 16 with the following amended paragraph:

Figure 30 illustrates a CORDIC (COordinate Rotation DIgital Computer)-like algorithm for vector quantization.

Please replace the paragraph beginning at page 12, line 13 with the following amended paragraph:

A polar modulator can be viewed as a combination of a phase modulator and an amplitude modulator. The demands placed on the phase modulator and amplitude modulator are directly dependent on the bandwidth of the signal's phase and magnitude

components, respectively. The magnitude and phase bandwidth, in turn, are dependent on the average-to-minimum magnitude ratio (AMR) of the signal. As will be shown later, a signal with large AMR can have very abrupt changes in phase, which means that the signal phase component has significant high frequency content. Furthermore, certain transistor technologies limit the AMR that can be achieved in a practical amplitude modulator. This limitation can lead to distortion of the transmitted signal if the required magnitude dynamic range exceeds that which can be generated by the transistor circuit. Thus minimization of signal AMR is highly desirable if the signal is to be transmitted with a polar modulator. One example of a polar modulator is described in U.S. Patent Application ~~Serial~~ No. 10/045,199 ~~(Dkt.)~~ entitled "Multi-mode communications transmitter," filed on even date herewith and incorporated herein by reference.

Please replace the paragraph bridging pages 35 and 36 with the following amended paragraph:

The difference in practice between an approach in which hole-blowing is performed taking account of t_{min} and an approach in which the calculation of t_{min} can be eliminated is illustrated in the examples of Figures15b and15c, respectively. In the example of Figure 15b, hole-blowing was performed using a root-raised cosine pulse that was the same as the pulse-shaping pulse. In the example of Figure 15c, hole-blowing was performed using a Hanning window for the correction pulse, with a time duration equal to 1/2 the symbol duration. As may be seen, in Figure 15c, the original signal trajectory is changed as little as possible i[[s]]n order to skirt the region of the hole. In

many instances (if not most), however, the calculation of t_{min} can be eliminated (as in Figure15b).

Please replace the paragraph bridging pages 36 and 37 with the following amended paragraph:

In the auxiliary path, the symbols (or chips) are applied to a correction DSP (which may be realized in hardware, firmware or software). The correction DSP performs hole-blowing in accordance with the exact method outlined above and as a result outputs an auxiliary stream of symbols (or chips). These symbols (or chips) will occur at the same rate as the main stream of symbols (or chips) but will <u>be</u> small in magnitude comparison, and will in fact be zero except when the signal of the main path enters or is near the hole. The relative timing of the main and auxiliary paths may be offset by T/2 such that the small-valued symbols of the auxiliary path occur at half-symbol timings of the main signal path.

Please insert a blank line immediately following the last full paragraph on page 42 of the specification.